
Adult abdomen to hip ratio

Important note: This is an archived metadata standard from the AIHW Knowledgebase. For current metadata standards and related information please access METeOR, the AIHW's Metadata Online Registry at <http://meteor.aihw.gov.au>

Identifying and Definitional Attributes

Data Dictionary: NHDD
Knowledgebase ID: 000373 Version number: 1
Metadata type: DERIVED DATA ELEMENT
Registration Authority: NHIMG Admin status: SUPERSEDED
Effective date: 01-JAN-03
Definition: A person's abdomen to hip ratio.

Adult abdomen to hip ratio is a continuous variable. Adult abdomen to hip ratio is calculated by: abdominal circumference (cm) divided by hip circumference (cm).

Context: Public health and health care:
Body fat distribution has emerged as an important predictor of obesity-related morbidity and mortality. Abdominal obesity, which is more common in men than women, has, in epidemiological studies, been closely associated with conditions such as coronary heart disease, stroke, non-insulin dependent diabetes mellitus and high blood pressure.

Abdomen to hip ratio (AHR) can be used:

- to indicate the prevalence of abdominal obesity and its sociodemographic distribution (problem identification);
- to evaluate health promotion and disease prevention programs (assessment of interventions);
- to monitor progress towards National Health Goals and Targets;
- to ascertain determinants and consequences of abdominal obesity;

and

- in nutritional surveillance and long-term planning.

Cutoff points for abdomen to hip ratio that may define increased risk of cardiovascular disease and all cause mortality range from 0.9 to 1.0 for men and 0.8 to 0.9 for women (Croft et al. 1995; Bray 1987; Bjorntorp 1985). These values are based primarily on evidence of increased risk of death in European populations, and may not be appropriate for all age and ethnic groups.

In Australia and New Zealand, the cutoffs of > 0.9 for males and >

0.8 for females were used in the Australian Bureau of Statistics' 1995 National Nutrition Survey.

Relational and Representational Attributes

Datatype: Numeric

Representational
form:

Representation N.NN
layout:

Minimum Size: 3

Maximum Size: 3

Guide For Use: Adult abdomen to hip ratio cannot be calculated if either component necessary for its calculation (i.e. abdominal circumference or hip circumference) has not been collected (i.e. is coded to 999.9).

Collection Methods: AHR should be derived after the data entry of abdominal circumference and hip circumference. It should be stored on the raw data set as a continuous variable and should not be aggregated or rounded.

It is recommended that in population surveys, sociodemographic data including ethnicity should be collected, as well as other risk factors including physiological status (e.g. pregnancy), physical activity, smoking and alcohol consumption. Summary statistics may need to be adjusted for these variables.

Related metadata: is calculated using Adult hip circumference - measured version 1 has been superseded by Waist-to-hip ratio version 2
is calculated using Adult abdominal circumference - measured version 1

Administrative Attributes

Source Document:

Source Organisation: Responsible organisations:
National Health Data Committee (NHDC) / National Centre for Monitoring Cardiovascular Disease,
Australian Institute of Health and Welfare.
(See also Comments)

Comments: Submitting organisation:
The Expert Working Group on Data Standards for Indicators of Body Fatness in Australian Adults through the National Centre for Monitoring Cardiovascular Disease, Australian Institute of Health

and Welfare. Date of submission: October 1997

This data element applies to persons aged 18 years or older. It is recommended for use in population surveys and health care settings.

Presentation of data:

Means, 95% confidence intervals, medians and centiles should be reported to one decimal place. Where the sample permits, population estimates should be presented by sex and 5-year age groups. Estimates based on sample surveys may need to take into account sampling weights.

For consistency with conventional practice, and for current comparability with international data sets, recommended centiles are 5, 10, 15, 25, 50, 75, 85, 90 and 95. To estimate the 5th and 95th centiles a sample size of at least 200 is recommended for each group for which the centiles are being specified.

[Data Element Links](#)

Information Model Entities linked to this Data Element

Data Agreements which include this Data Element
